

Water-Data Report 2013

06174500 MILK RIVER AT NASHUA, MT

Milk Basin
Lower Milk Subbasin

LOCATION.--Lat 48°07'48", long 106°21'52" referenced to North American Datum of 1983, in NE ¼ NE ¼ sec.1, T.27 N., R.41 E., Valley County, MT, Hydrologic Unit 10050012, on right bank at downstream side of former highway bridge site, 0.6 mi southwest of Nashua, 2.0 mi upstream from Porcupine Creek, and at river mile 22.7.

DRAINAGE AREA.--22,332 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--Water Supply Paper 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,027.75 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except for estimated daily discharges, which are poor. Flow increased during irrigation season by water from St. Mary Canal which diverts from the St. Mary River near Babb. Flow is regulated by Fresno Reservoir (station number 06136500), two reservoirs in Lodge Creek basin in Saskatchewan, and four reservoirs in Frenchman River basin in Saskatchewan. Diversions for irrigation include about 140,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

06174500 MILK RIVER AT NASHUA, MT—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	109	228	e169	e169	e196	e381	e980	1,210	2,180	2,750	436	385
2	106	231	e186	e169	e203	e383	e880	1,550	3,880	2,570	436	383
3	98	250	e186	e169	e205	e392	e2,300	1,670	4,420	2,390	437	383
4	79	294	e186	e169	e207	e381	e3,150	1,690	5,370	2,190	494	386
5	61	300	e186	e151	e220	e389	e1,510	1,620	7,330	1,950	577	395
6	53	294	e186	e151	e216	e381	e2,170	1,390	8,160	1,710	672	408
7	47	284	e186	e169	e216	e396	e2,150	1,150	8,420	1,450	737	433
8	44	261	e186	e169	e221	e397	e1,850	984	8,520	1,130	742	533
9	41	241	e186	e186	e214	e406	e1,640	877	8,580	956	702	659
10	40	e197	e186	e223	e214	e396	e1,240	777	8,670	958	672	748
11	44	e156	e169	e216	e214	e396	1,200	690	8,680	1,300	666	879
12	239	e123	e169	e214	e220	e370	813	644	8,660	1,810	656	1,070
13	299	e130	e186	e205	e222	e334	513	595	8,660	1,920	644	1,050
14	266	e134	e186	e203	e231	e286	554	542	8,620	1,840	643	955
15	234	e134	e186	e203	e246	e619	574	487	e8,540	1,580	670	879
16	212	e151	e186	e205	e264	e792	406	476	e8,200	1,400	681	825
17	190	e151	e169	e214	e264	e815	488	436	e8,000	1,280	703	799
18	178	e169	e169	e216	e284	e834	677	400	7,680	1,180	734	799
19	165	e186	e169	e216	e278	e844	808	443	7,010	1,100	736	779
20	158	e186	e169	e214	e282	e680	1,570	527	6,010	1,050	752	697
21	179	e203	e169	e212	e282	e582	e2,270	516	4,790	1,000	730	571
22	148	e203	e169	e205	e297	e522	e2,290	454	4,020	936	695	491
23	134	e186	e169	e205	e322	e485	2,310	387	3,640	865	635	489
24	148	e186	e169	e205	e327	e457	2,350	e341	3,260	e803	562	478
25	185	e186	e169	e211	e363	e454	2,070	e305	2,910	e737	494	442
26	209	e186	e151	e214	e372	e404	e1,670	e295	2,710	e683	440	452
27	210	e169	e134	e216	e374	e454	e1,200	e285	2,320	e629	409	395
28	204	e169	e134	e216	e381	e407	e950	281	2,470	e571	392	399
29	198	e169	e134	e214	---	e340	e978	228	2,750	e518	374	396
30	195	e169	e151	e205	---	e530	1,000	291	2,790	484	369	396
31	210	---	e151	e203	---	e647	---	558	---	450	379	---
Total	4,683	5,926	5,301	6,137	7,335	15,154	42,561	22,099	177,250	40,190	18,269	17,954
Mean	151	198	171	198	262	489	1,419	713	5,908	1,296	589	598
Max	299	300	186	223	381	844	3,150	1,690	8,680	2,750	752	1,070
Min	40	123	134	151	196	286	406	228	2,180	450	369	383
Ac-ft	9,290	11,750	10,510	12,170	14,550	30,060	84,420	43,830	351,600	79,720	36,240	35,610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	289	208	157	147	235	1,210	2,118	1,066	1,253	659	297	275
Max	6,837	768	487	843	2,337	6,678	20,930	8,361	14,200	3,578	1,754	2,138
(WY)	(1987)	(1987)	(1987)	(1974)	(1996)	(1986)	(1952)	(2011)	(2011)	(1962)	(1993)	(1978)
Min	34.4	61.2	39.7	36.0	38.9	56.5	15.1	10.5	28.0	3.56	3.42	12.6
(WY)	(2002)	(2002)	(1984)	(1950)	(1949)	(2002)	(1981)	(1992)	(1984)	(1984)	(1984)	(1988)

06174500 MILK RIVER AT NASHUA, MT—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1940 - 2013	
Annual total	170,025		362,859			
Annual mean	465		994		b ₆₅₉	
Highest annual mean					3,428	2011
Lowest annual mean					57.7	1984
Highest daily mean	4,020	Jun 1	8,680	Jun 11	44,200	Apr 18, 1952
Lowest daily mean	40	Oct 10	40	Oct 10	0.00	Jul 14, 1984
Annual seven-day minimum	47	Oct 5	47	Oct 5	0.00	Jul 17, 1984
Maximum peak flow			8,740	Jun 10	45,300	Apr 18, 1952
Maximum peak stage			18.81	Jun 10	31.38	Apr 18, 1952
Instantaneous low flow			a ₃₄	Oct 10	0.00	Jul 14, 1984
Annual runoff (ac-ft)	337,200		719,700		477,600	
10 percent exceeds	1,030		2,290		1,300	
50 percent exceeds	309		396		177	
90 percent exceeds	154		169		60	

^aGage height, 1.63 ft.

^bMedian of yearly discharge, 525 ft³/s, 380,400 ac-ft/yr.

